

Specifications

TYPE

General Marine Construction
Coring, Diving and ROV Support

BUILT

Burton Shipyard, Inc.
Port Arthur, Texas

CERTIFICATION

ABS Load Line Certificate
297 Gross Tonnage
200 Net Tonnage

MACHINERY

Main Engines: 2 Caterpillar D-398-TA, 800 H.P. Each
Reduction Gears: Caterpillar 4:1
Propellers: 78" x 66", 4 Blade
Engine Controls: Pneumatic
Generators: 2 GMC 671, 60 KW, 208 VAC
Steering: Hydraulic

NAVIGATION

Radar: 1 Decca, 1 Furuno
Autopilot: Navcomp
Fathometer: 1 Furuno, Color, 600 Fathom 1 Sitex
Loran C: Sitex
Compass: KVH Fluxgate
Trimble Differential GPS Surface Navigation (Optional)

COMMUNICATIONS

2 VHF Units
SSB: Stephens Sea 222
APM Company Unit
Cellular Phone/Fax
Call Sign: WC07568

DIMENSIONS

LOA: 165'
Breadth: 36'
Draft: 9'-6"
Clear Deck Space: 80' x 30'

DECK MACHINERY

Crane: 40-Ton P & H Hydrocrane, Pedestal Mounted
Anchor System:
Skagit RB-90 Double Drum Winches (2)
Hydraulic Levelwinds
Up to 4,200' of 1-1/8" Wire on Each Anchor
3,000 Lbs. or 6,000 Lbs. Anchors (4)

QUARTERS

Berthing for 29 Persons

PERFORMANCE

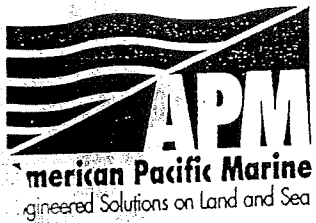
Speed, Light: 9.5 Knots
Speed, Loaded: 9.0 Knots
Fuel Consumption (Approx): 1,100 Gallons Per 24 Hours at 9 Knots Loaded
Range: 8,000 Miles
Endurance: 30-45 Days

CAPACITIES

Fuel: 50,000 Gallons
Potable Water: 50,000 Gallons
Deck Cargo Deadweight: 100 Tons
Lube Oil: 2,000 Gallons

SPECIAL FEATURES

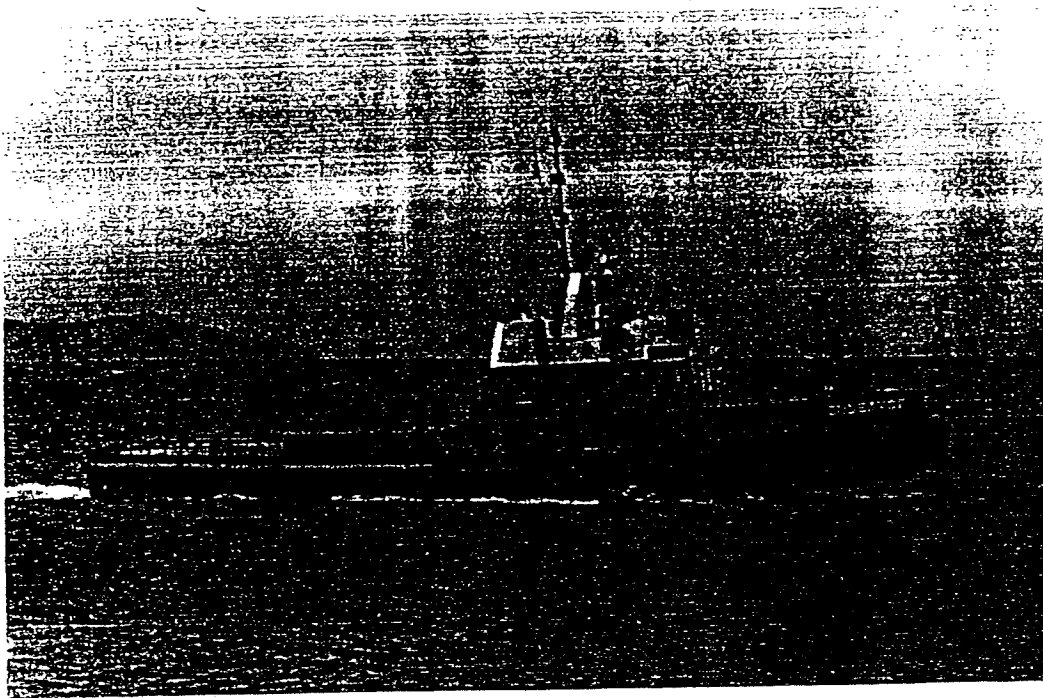
4-Point Mooring with 3,000 or 6,000 Lbs. Anchors
Stern Roller
24" Moon Pool
Full Galley with 2 Walk-in Coolers and Freezers
1,200 Gallons Per Day Water Maker
2 Washer/Dryer Laundry



M/V AMERICAN ENDEAVOR

65' Utility Boat

(Formerly M/V Coronado)



Dive Support • ROV Support • Equipment Transport

Anchor Support

Bathymetry/Side Scan Sonar Surveys

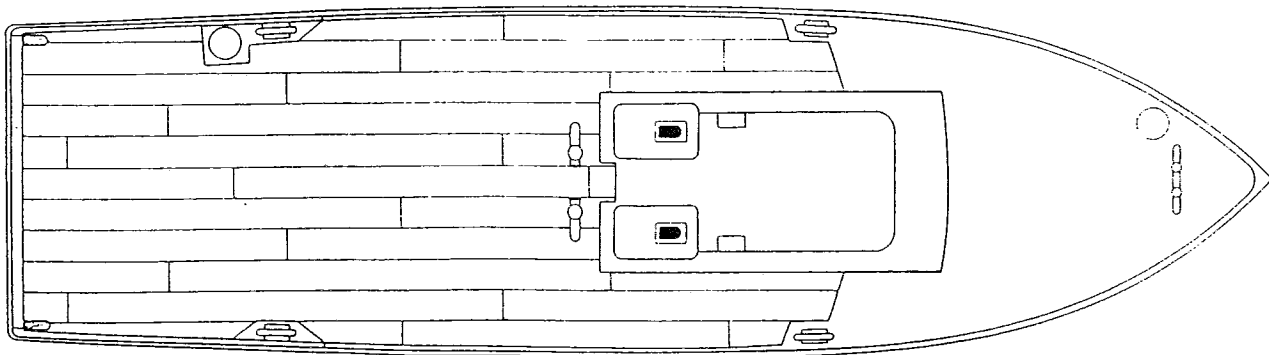
Tug Boat Service

USCG Certified to Carry Cargo

USCG Certified to carry 18 Passengers

480 Sq. Ft. Open AFT Deck Space

Home Port is Ventura, California



Specifications

TYPE

Utility

SIZE

L.O.A.: 65'

Breadth: 18'

Draft: 6' 6"

Open Deck Space: 16' x 30'

Gross Tons: 54

Net Tons: 36

CERTIFICATION

Official Number: D288101

USCG Certificate of Inspection

Service: Passenger (18 maximum)

Maximum Deck Cargo: 40,000 lbs.

MACHINERY

Main Engines: 2 Caterpillar D343TA, 350 h.p. each

Generators: 60 KVA 220/480 VAC 3 Phase

3.5 KW 120/240 VAC 3 Phase

NAVIGATION

Radar: Furuno FRS48

Fathometer: Koden CVS 801C

Auto Pilot: Sperry 8T

COMMUNICATIONS

3 VHF Units

1 APM Company Unit

Call Sign: WC07248

DECK MACHINERY

Winch: Skagit, Model BU-30 Single Drum 20,000 lbs. Line Pull

PERFORMANCE

Speed 10.0 Knots

Fuel Consumption: 400 G.P.D. (approx.)

CAPACITIES

Fuel: 3,500 Gallons

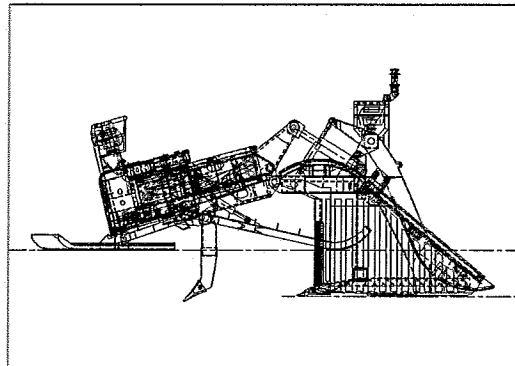
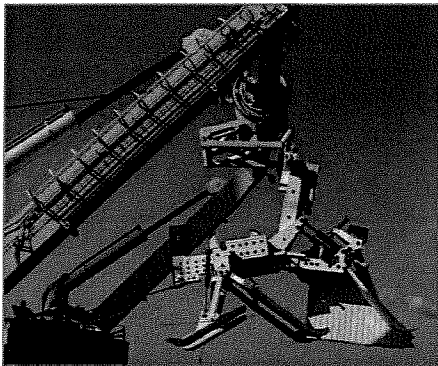
Fresh Water: 75 Gallons

Sea Plow, ROV and Sonar Fish

Plough Technical Information

Heavy Duty Cable Plough

Alcatel has worked together with leading plough designers to develop the "Heavy Duty Plough". Alcatel are the only company who can offer this latest state-of-the-art heavy duty cable plough.



The main force that keeps a plough share engaged in the seabed is the self weight of the plough. This may be complemented by the reaction of the soil on the share. The leading edge of the share has a negative rake angle (i.e. the leading edge of the share is inclined backwards from vertical) and the reaction of the soil pulls the plough into the seabed. As the negative rake angle increases, the magnitude of the downward force increases. Conversely, with a positive rake angle (i.e. the share is inclined forwards) the reaction of the soil on the plough will be to lift the plough out of the ground. In practice the reaction of the soil is slightly below the plane of the share and a vertical share will experience an upwards force as it is dragged through the soil.

Ploughs are supported by skids at the front and the underside of the share at the rear. The load applied by the share is greater than the load applied on the front skids. In very soft soils, which have insufficient strength to support the weight of a plough, the plough will pitch aft as the share sinks.

In hard soil the plough is normally kept pitched forwards. This keeps the weight of the plough on the share tip and helps to initiate penetration. However this must be balanced against the effect of a large pitch angle resulting in the heel of the plough being higher than the share tip, reducing the burial depth achieved. The optimum forward pitch angle is about 2°.

The Heavy Duty Plough is designed to achieve burial in relatively hard seabeds with the additional ability of enhanced rock fracturing. This is achieved by the attachment of rock tooth and additional weight. It has the same articulation ability in the plough frame as conventional 3m ploughs (which are designed to achieve 3m burial in very soft sediments) but without compromising the ability of the plough to achieve burial in relatively hard seabeds.

Ploughs designed to achieve deep burial have, by inference, a deep share. This has the disadvantage that in hard soils, where deep burial is not required, the tow point can be high above the seabed. This produces a torque reaction on the plough, reducing the weight applied to the share tip at the time at which it is most needed to maximise penetration and hence burial of the cable. To overcome this, the plough is articulated in the middle to keep the tow point at a low height while trenching at shallow depth in hard soils and to maximise the effective depth of the share in soft soils.

The rock tooth has been sized around those used by large Caterpillar tractors used in mineral quarrying. This has given the basis for the tow force capacity and the weight of the plough.

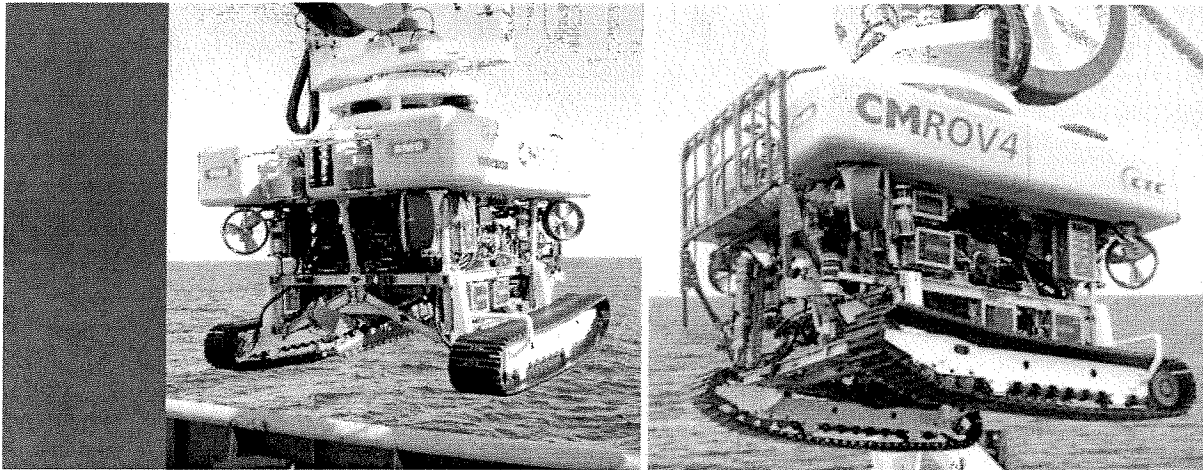
The additional weight of the plough (approx 35 Tonne in air) together with the negative rake on the share, does improve the ability of the plough to penetrate into the seabed.

	Typical Specifications
Trench Depth	up to 3.0 m
Pull force	130-150t max
Size (LxBxH)	10.7m x 6m x 4.8m
Weight	30t - 40t
Cable type	All telecoms cables, 1.5m bend radius
Repeaters	All telecoms repeaters up to 400mm dia
Water depth	Max. 1,500m
Soil types	Clays, sands, consolidated sediments and fractured rock
Handling	By tow rope using lifting drawbar
Control system	From surface using sophisticated control system

Cable Maintenance ROVs 3 & 4

Technical Specification

Cable Maintenance ROVs 3 & 4



CMROV 3 and CMROV 4 are powerful, 300kW / 400hp, tracked or free-swimming jetting ROVs offering economic high performance for worldwide cable burial and maintenance operations.

**Marine Trenching & Cable
Installation Services**
Across the World



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